



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# THE AMERICAN NATURALIST

---

VOL. XXV.

NOVEMBER, 1891.

---

299.

## LANGUAGE AND MAX MÜLLER.

BY S. V. CLEVINGER, M.D.

THE talented linguist who has contributed the series on "Language and Thought" to the *Open Court* says: "Certain it is that no philosopher has as yet utilized the new facts which the science of language has placed at his disposal." As most of these new facts are but corollaries of the evolutionary theory, and as philology was revolutionized by that theory and put upon a sure foundation, the remark is incautiously made. Herbert Spencer pointed out paths for the philologist and anticipated much that has been proven; August Schleicher discusses in accordance with the theory of natural selection how the various forms of speech have developed and divided into dialects and species; and Wilhelm Bleek has dipped into the origin of language. Friedrich Müller's ethnography, which accords language the first place in racial determinations, supplanted the Blumenbachian division into five races, based upon the Semitic myth of descent from a single pair.

Language and speech are used interchangeably by Max Müller, though gesticulation is tacitly and finally directly included; and how proper this inclusion is the science of cerebral physiology fully shows, yet not a single allusion was made to this important field of research. Müller claims a place among the physical sciences for the science of language, though he seems to completely ignore brain anatomy, general physiology, ethnology, and other cognate sciences that interpret speech processes.

There should be no underrating of the great value of Max Müller's work. He has built himself an enduring monument in his contributions to philology; but I affirm that his labor has been more in the line of polyglot grammar generally. It is no slur upon the value or extent of Müller's work to say this, for this department of philology is just as capable of being deeply mined as any other portion of human knowledge; but Müller has missed availing himself of what had been worked out by other thinkers.

That he has become entangled in the mere wordiness of some ideas is apparent in his stating that Darwin has shown the inappropriateness of the word species, but that he has substituted varieties in its stead. Müller admits genera and individuals, but neither varieties nor species. Now if there was one thing above all others that Darwin did make clear, it was the trashiness of all these terms, from genus to variety, when used in the olden fixation sense. Nevertheless, in chemistry, botany, zoology, and even where the arbitrary relative terms genus, species, and variety are indispensable, nothing is capable of absolute classification; for everything is relative. Even the vertebrates cannot be sharply set apart from the invertebrates, for we are compelled to include the notochordal animals without backbones among the vertebrates. What Darwin did was to show that species, the limbs of a tree, were not trunks of separate trees, but that twigs and branches were often undistinguishable apart.

Throughout Max Müller's writings he is handicapped by his exaggeration of the importance of his particular line of research carried on as an isolated study. Could he but have a fair knowledge of associated sciences, such as that of anthropology, anatomy, physiology, and zoology, the value of his work would be greatly increased, and his inferences would undergo radical changes. He seems to base everything upon the derivation of a word, and says that etymology should not be laughed at. Undoubtedly a careful study of vocabularies aids us in tracing the origin of races, but languages have always been in an eternal flux, even though the meaning of words may sometimes show the intention with which words were framed, and in a few instances

give an insight to the thoughts of Paleozoic people. Those who have lived with savages, and are familiar with the puerility of their conceptions and their disposition to incessantly invent words and then forget them, are able to estimate gibberish at its proper value. When Chicago was a frontier trading post, log cabins and tents domiciled the people. Frame houses took the place of these as the village grew. Occasional small brick houses appeared as the town spread out; but scarcely a vestige of any of these dwellings remains among the towering masonry of the Chicago of to-day, with its million and a quarter of inhabitants. Too little attention has been paid to the fact that a growing, living language receives accessions from all sides. Our modern English is a fearful jargon, combined from many ancient and modern languages, civilized and savage; and necessarily so will speech be with a people who are living, expanding, in a restless age, accumulating ideas from all parts of the world. It is a very common mistake of the theologically biased, who imagine that language had a directly divine origin, that simplicity of construction of a tongue indicates this and is to be admired; when the fact of the matter is, irregularity of declension and conjugation are invariably produced by the mingling of people who speak different languages.

The Australian savage language is exceedingly regular and simple, in keeping with its poverty of ideas. The Spanish language is probably the most beautiful, resonant, inflexible, of any of Latin descent. But what is there in the Spanish language? The inquisition, in destroying thousands of thinkers in that country, male and female, helped to fix and impoverish Spanish brains and tongues. There is always wanting a proper consideration of the fact that, so far from being dependent upon language, far too often language has deranged thought, introduced confusion where even the deaf and dumb have thought more clearly. Gesticulation is an important means of communication between savages, so much so that the Australian primitive people could not understand each other in the dark; and the Chinese frequently resort to writing to make themselves better understood.

Müller wishes language to be regarded as a physical science. Granting that it is such, why then should it be isolated from all other sciences? Chemistry would be lame indeed without physics; and what would astronomy be without either?

Berkeley was right in saying that words are often impediments to thoughts. They do in many cases convey wrong impressions. They are false symbols, and, being inadequate, choke the intellectual processes.

Huxley says that the sooner you forget the derivation of a word, and use it in zoology, etc., as a mere arbitrary associated name (*nomen proprium*), the better you are off.

The fact cited, that the Greeks had but one name for language and thought, is about as important as that the Cheyenne Indians have but one word for head and leg.

The illustration of Gambetta shows that by habit thinking can be elicited in some only by speaking. It is an exercise of the symbolic field; but how is it that we find some of our greatest thinkers most reticent? Sir John Hunter could express himself with difficulty, and the most voluble elocutionist or orator may have an empty head.

Müller is unequivocal in making thought inseparable from language and considering them identical. "We think in names, and names only," he says. Do we? What did Caspar Hauser name his guardian?

Hobbes is quoted approvingly in saying that "truth and falsity have no place but among such living creatures as use speech," when the fox and wolf resort to subterfuges, and dogs and cats know that playing is not in earnest.

He reduces all languages to a few words, and then turns his back upon what it indicates,—that man came from primitive stock. He states that "nature produces the greatest effects by the smallest means," and yet Müller turns to the supernatural to account for language.

The "bow-wow theory" is contemptuously disposed of, and "*clamor concomitans*" is not anatomically referred to as depending upon effort and air expulsion from the throat.

He is like a blind would-be botanist who tries to picture trees by listening to the wind blowing through the branches.

Attempt a word analysis of a single expression,—appearance of eyebrows, wrinkles, corrugations, depression or elevation of nose and mouth,—and reflect what cumbersomeness words entail upon thought.

What words does the momentarily rapidly performed face reading require? You see expressions of myriad kinds flitting over faces,—you read them, but not in words. You cannot or do not analyze them. The unconscious association of the expression with an impression, true or false, which that expression makes upon your mind, it is impossible to put into words.

Mill is referred to as making logic depend upon words. Now imagine the logical deduction of a soldier who sees a gun pointed at him, and hence reads himself an essay that ends in advising himself to dodge behind a tree.

“Dumb animals” cannot be denied thought, they do not even analyze consciously their impressions, yet they study conditions to advantage, make up their minds to act offensively or defensively without a word; the infant does pretty much the same, so do the deaf and dumb.

Passing now to demonstrate facts, making a study of the machine instead of the noises it makes, it is well known to physicians that the seat of language in the brain in right-handed people is in the left side a little in front of and above the ear. In left-handed people the location is upon the corresponding right side of the brain.

These facts have been ascertained by exceedingly simple means, an injury to those portions causing an interference with the speech function, sometimes to the extent of destroying it. This speech function may be wholly and totally obliterated by disease, and yet the individual may be capable of transacting business, buying, selling, and directing his affairs generally and intelligently. He may make a will disposing of his property, he may think deeply and correctly, and yet be unable to express himself by speech; and on the other hand thought may be badly deranged and the speech faculty may remain intact. If language and

thought develop together and symmetrically, then the voluble Blind Tom should be a pundit instead of the idiot which he is. The ability to write may be taken away from us by disease and the faculty for speaking be left unimpaired; and per contra aphasia, or speech interference, may exist without agraphia, or the loss of the ability to write. These facts alone tend to disprove Max Müller's dicta. But much more can be added. In the disease called chorea or St. Vitus's dance, if the derangement of the motions begins on the left side the speech is not affected until the right side also of the body is diseased. Although in a very severe case of chorea in a young lady of twenty two the patient told me that her thoughts were perfectly clear until she attempted to speak, and then she became confused, this does not indicate that her thoughts and speech were inseparable, but that when she voluntarily attempted to translate her thoughts into speech the want of coördination produced mental confusion, and consequently speech inability. The maniac thinks too fast to be able to connect his words intelligently. It is a pernicious notion that ideas depend upon words; but "object teaching" alone disproves it. The senses may know things better than words can express them. We know that we can understand objects better by seeing, feeling, etc., rather than by description. Words indicate things; but we have to understand what those words mean first, showing that understanding precedes words. Language may in some increase the capacity for higher thought, but language cultivation alone does not increase thoughtfulness. The gymnast is not a watchmaker or pianist, nor is the elocutionist an originator. The talking ability of the parrot may be cultivated to its highest extent, but that bird will remain as thoughtless as any of his dumb ancestry.

When the right side of the body is paralyzed the speech ability is usually lost at the same time, and the mind may or may not be involved; but when the left side is paralyzed the speech is not impaired unless the patient is left handed, and the mind is less apt to be affected in left-sided paralysis.

An arm, a leg, one side of the face may be paralyzed, with or without speech disease, from brain injury, depending upon the

part of the brain affected. Certain areas of the brain preside over voluntary control of fingers, arms, legs, lips, lungs, etc., and movements of these to perform intelligent coördinate action are regulated by spots of brain surface called centers, which are nourished by special blood vessels. According to the extent of damage to these vessels will be the degree of paralysis, whether restricted or general, involving one or many bodily parts.

Slanting diagonally downward and forward in the outer part of the brain, just above the ear, lie these centers that control the arm, leg, fingers, and speech parts, and this portion has been appropriately termed the "symbolic field," because through its exercise and integrity man is able to gesticulate, point, threaten, with hands or feet, or to regulate the motions of the diaphragm, larynx, tongue, lips, in a comparable manner, to produce conventional sounds that serve better purposes than making gestures, but to the same end,—to make himself understood. It is difficult for us to consider the regulation of sounds into language as equivalent to gesticulation, but nevertheless nature makes but little distinction between her methods of symbolizing in these ways. The savage uses gestures where his speech centers are poorly educated, and the linguist represses his use of bodily contortions because his words can make him better understood. The ear has been trained to understand the minute variations in sound involved in speaking, where previously the eye interpreted less satisfactorily the symbolic movements.

And just as the symbolic field develops in man, so that part of the brain was built up and lifted the forehead into a more upright plane. But the fact that this symbolic field may be destroyed and thought remain shows that thought is not centered in that part, but is merely associated with it. To a great extent the mentality resides in the left frontal lobe, just in front of this symbolic field. This part may develop with or independently of the speech, leg, or arm centers, proving that thought is not language, but that language is merely a means of expressing thought, just as any other gesticulation is.

The baby's movements are at first badly regulated; he kicks, sprawls, and throws his arms, often in the wrong direction, when



he attempts to grasp some object. He merely denotes pleasure and pain in general by laughing and crying. Little by little the infant regulates his movements for walking and handling, and acquires the ability of pointing at or motioning away persons, denotes pleasure by nods and smiles, and displeasure by shaking his head or turning away, and soon he begins to articulate such words as "go way," "lemme alone," etc.

Nothing could be simpler and more convincing, by way of refutation of Müller's position, and innumerable facts of the kind could be additionally brought forward to demonstrate that thought is one thing and language another, and that he might as well say that thought is gesticulation of all kinds, for language is, after all, only gesture of vocal parts.

An important inference from this is that manual training would develop the symbolic field of the brain and afford a basis for mental development, where purely linguistic studies would tend to create inefficiency by crowding the speech center with symbols that are seldom used, comparable to the differences in education and usefulness that exist between the skilled mechanical engineer and the clownish contortionist.